ABSTRACT

A transmitting/receiving apparatus wherein a decision of performing SDM communication accompanied by a directivity control is correctly performed to improve the transmission efficiency. In the apparatus, a channel estimating part (205) performs channel estimation by use of known symbols included in a received signal. A channel variation deciding part (206) determines a correlation value between a channel estimation result of an immediately preceding process and that of a current process to determines the magnitude of a channel variation, and the determines, based on the magnitude of the channel variation, whether to perform SDM communication accompanied by a directivity control of perform SDM communication not accompanied by the directivity control. When a radio receiving part (107) receives a transmitting weight, a switching part (108) outputs the received transmitting weight to multipliers (103-1 to 103-n). When the receiving part (107) receives a signal an instruction of performing SDM communication not accompanied by the directivity control, the switching part (108) outputs, as the transmitting weight, "1" indicative of performing no directivity control, to the multipliers (103-1 to 103-n).